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(71) Applicant: **MACLAREN LIMITED**
Station Works
Long Buckby, Northamptonshire NN6 7PF(GB)

(72) Inventor: **Daykin, Kevin**
Bolberry House,Creation Road
Hollowell, Northampton NN6 8RP(GB)

(74) Representative: **Johnson, Terence Leslie et al**
Edward Evans & Co. Chancery House 53-64
Chancery Lane
London WC2A 1SD(GB)

(54) A cot.

(57) The invention relates to a cot, particularly a nursery cot, having a drop side 2 wherein there is a mechanism 3 for raising and lowering the drop side 2 comprising complementary relatively slidable means 4, 5 on opposite ends of the drop side 2 and adjacent members 6 of the cot, and biassing means 7 adapted to secure the drop side 2 in the raised position and which allows the drop side 2 to move to the lowered position when the bias thereof is overcome.

The relatively slidable means 4, 5 comprises a groove 8 in each end member 6, and projecting spigots 4 with enlarged heads (not shown) projecting from the opposite ends of the drop side 2. The enlarged heads are spaced from the opposite ends of the drop side 2 a sufficient distance to engage in the respective grooves 8, and allow relative sliding motion vertically. The grooves 8 are of T-shape in cross section, the enlarged heads essentially engaging in and sliding up and down in the "head" 9 of the "T", the shank of the "T" allowing for passage and sliding of the spigot 4, which is of less lateral dimension then the head. The groove 8 has an enlarged part 10 at the bottom, as viewed, for initial entry of the head and there is mounted therein a resilient buffer (not shown).

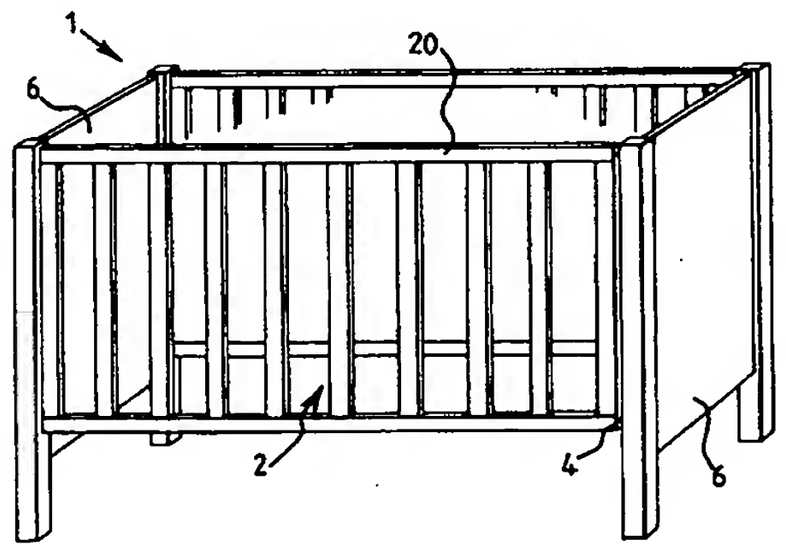

FIG.1

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The invention relates to a cot, particularly a nursery cot, having a drop side.

Operation of the drop sides of such cots is often such that it is usually necessary to operate mechanism at each side manually, so that the sides often jam, and in any event carrying out these operations while holding an infant or baby can be difficult.

It is accordingly an object of the invention to seek to mitigate these disadvantages.

According to the invention there is provided a cot having a drop side, wherein there is a mechanism for raising and lowering the drop side comprising complementary relatively slidable means on opposite ends of the dropside and adjacent members of the cot, and biassing means adapted to secure the drop side in the raised position and which allows the drop side to move to the lowered position when the bias thereof is overcome.

The relatively slidable means may comprise a groove in each of the adjacent members and projecting spigots on the opposite ends of the drop side.

The groove may terminate in a blind slot in a plane substantially parallel to the plane of the length of the groove.

The blind slot may be separated from the groove by an upstanding nib.

The biassing means may comprise a spring inclined towards the blind slot.

The spring may be a leaf spring inclined at about 30° to the length of the groove.

A cot embodying the invention is hereinafter described by way of example with reference to the accompanying drawings.

Fig. 1 is a perspective view of a nursery cot according to the invention; and

Fig. 2 is, to an enlarged scale, a side elevational view of an end rail of the cot of Fig. 1 showing part of mechanism for allowing drop side operation.

Referring to the drawings there is shown a cot 1, having a drop side 2 , wherein there is a mechanism 3 for raising and lowering the drop side 2 comprising complementary relatively slidable means 4, 5 on opposite ends of the drop side 2 and adjacent members 6 of the cot, and biassing means 7 adapted to secure the drop side 2 in the raised position and which allows the drop side 2 to move to the lowered position when the bias thereof is overcome.

The relatively slidable means 4, 5 comprises a groove 8 in the adjacent member 6 of the cot 1, for example the ends, and projecting spigots 4 with enlarged heads (not shown) projecting from the opposite ends of the drop side 2. The enlarged heads are spaced from the opposite ends of the drop side 2 a sufficient distance to engage in the respective grooves 8, and allow relative sliding motion vertically. The grooves 8 are of T-shape in cross section, the enlarged heads essentially engaging in and sliding up and down in the "head" 9 of the "T", the shank of the "T" allowing for passage and sliding of the spigot 4, which is of less lateral dimension then the head. The groove 8 has an enlarged part 10 at the bottom, as viewed, for initial entry of the head and there is mounted therein a resilient buffer (not shown). The upper (as viewed) end of the groove 8 leads to a seat in the form of a blind slot 11, the seat 11 being displaced laterally of the plane of the length of the main body of the groove 8 from which it is separated by an upstanding nib 12 having a rounded nose or free end. The biassing means 7 of the mechanism 3 is in the form of a spring inclined towards the blind slot 11 from a side of the groove 8 opposite the blind slot. The spring in the embodiment shown is in the form of a leaf spring 13, which is one leg of a V-shaped spring the other 14 of which terminates in a hook 15 which hooks over a fixing device such as a screw 16. The spring 7 is mounted in a pressing set in a rebate in the body of the end member of the cot and this is covered with a metal plate 17, also set in the rebate to be substantially flush with the face of the body facing the end of the drop side 2, and providing the nib 12. The screw 16 is one of four screws 16, 16', 16'', 16''' which hold the pressing and plate together and in position in the body of end member 6.

The mechanism described is on a lower part of the face of the end member 6 of the cot. Above it there is a further groove 18 which receives a projecting spigot of the cot drop side 2, for relative sliding motion, there being a buffer (not shown) in an enlarged lower part 19 of the groove 18. The horizontal axis of the grooves 8 is laterally offset from, and subtantially parallel to, the longitudinal axis of the groove 18. The axis of the groove 18 is colinear with the centre of the slot 11.

In operation with the upper spigot in the groove 18 and the spigot 4 of the mechanism 3 in the groove 8, it will be assumed that the drop side is in a lowered position. In this position, the heads seat on the respective buffers. If it is desired to close the cot by raising the drop side 2 to the raised position, it is merely necessary to grip the drop side 2 say by its upper rail 20 and raise it vertically. The spigots slide in the grooves to the top. At the top of the groove 8, the spring 13 is pushed to the right as viewed, against its bias. It thus urges the spigot 4 to the left, over the nib 12, and the spigot 4 on release of the drop side 2, drops into the seat 11. Alternatively, it can be lowered in manually. In either case, the spiogot 4 is seated in the seat 11 and is held there by the spring 13, which acts as a guard to prevent unwanted use.

The drop side 2 is therefore safely and securely maintained in the raised position. To lower the drop side 2, it is gripped, raised and at the same time pushed by the leg or hip of the user outside the cot 1 towards the interior of the cot so that the spigot 4 pushes the spring 13 against its bias to the right as viewed so that the groove 8 becomes unobstracted; the side 2 can then be lowered, spigots 4 travelling down their respective grooves to rest on the buffers, which absorb any shocks on impact.

It will be understood that respective grooves, and the seat 11 and springs 7 are within the body of the end members 6 of the cot 1, so there are no projecting parts which can trap fingers, snag on clothing, or be tampered with by unauthorised user.

The drop side can be manipulated with one hand in raising and lowering operations.

It will further be understood that a drop mechanism at one side only of the drop side 2 has been described. An identitical one is provided at the opposite side.

Claims

1. A cot having a drop side, comprising a mechanism for raising and lowering the drop side, characterised by complementary relatively slidable means (4, 5) on opposite ends of the drop side (2) and adjacent members (6) of the cot (1), and by biassing means (7) adapted to secure the drop side (2) in the raised position and which allows the drop side (2) to move to the lowered position when the bias thereof is overcome.

2. A cot according to Claim 1, characterised in that the relatively slidable means comprises a groove (8) in each of the adjacent members (6) and projecting spigots 4) on the opposite ends of the drop side (2).

3. A cot according to Claim 2, characterised in that the groove (8) terminates in a blind slot (11) in a plane substantially parallel to the plane of the length of the groove (8).

4. A cot according to Claim 2, characterised in that the blind slot (11) is separated from the groove (8) by an upstanding nib (12).

5. A cot according to Claim 3 or Claim 4, characterised in that the biassing means (7) comprises a spring (13) inclined towards the blind slot (11).

6. A cot according to Claim 5, characterised in that the spring (13) is a leaf spring inclined at about 30° to the length of the groove (8).

7. A cot according to Claim 6, characterised in that the spring (13) is of substantially V-shape and in that one leg (14) thereof terminates in a hook (15) secured to a fixing device (16).

8. A cot according to any of Claims 2 to 7, characterised by a further groove (18) spaced above, in use, the groove (8) and by a spigot received in the groove (18).

9. A cot according to Claim 8, characterised in that the longitudinal axis of the groove (8) is laterally offset from and substantially parallel to the longitudinal axis of the groove (18).

10. A cot according to either of Claims 8 or 9, characterised by an enlarged portion (10) (19) of the respective groove (8), (18), preferably containing a buffer.

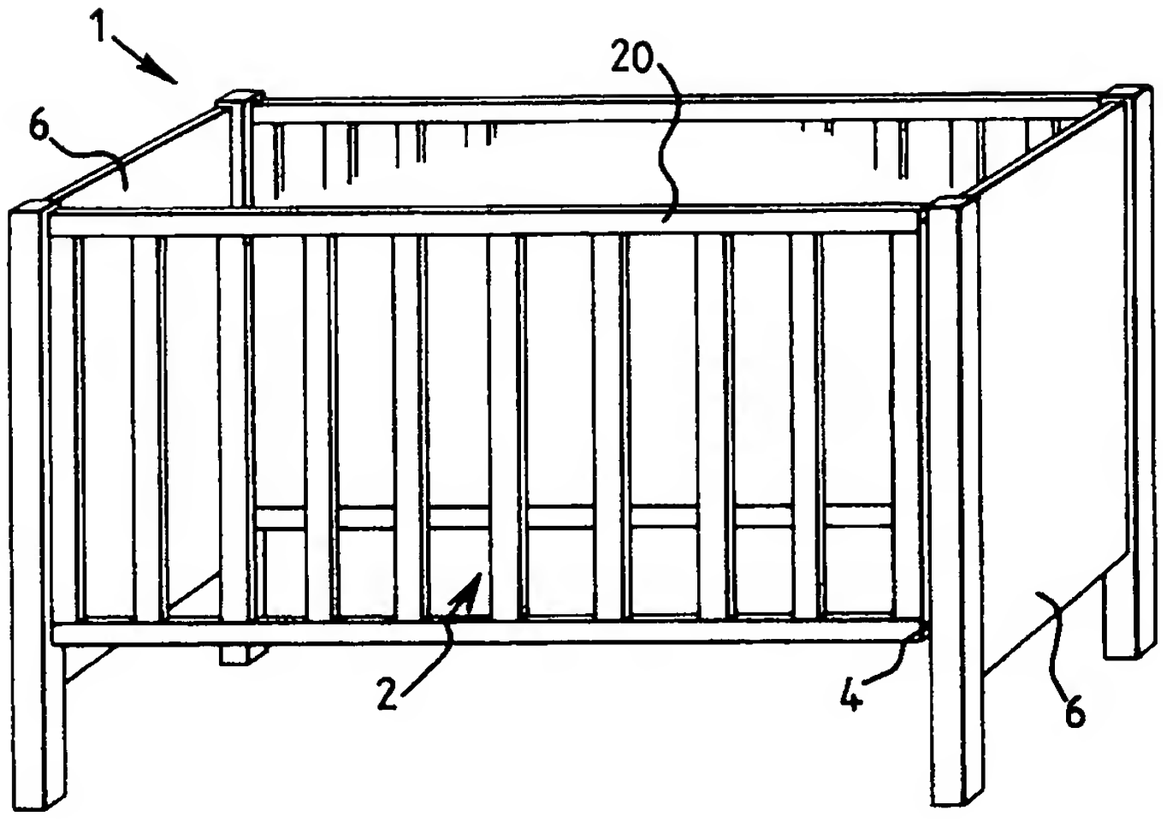

FIG.1

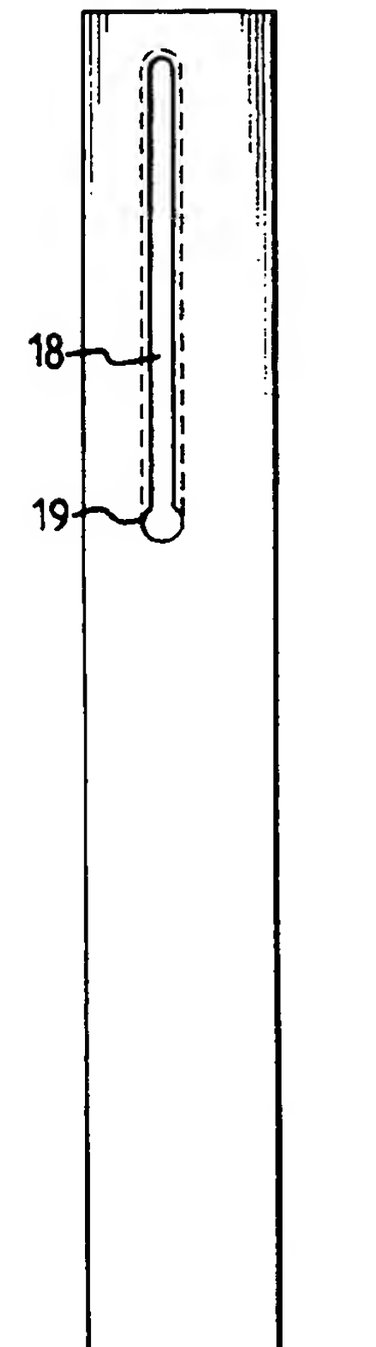

FIG.2

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EUROPEAN SEARCH REPORT

Application Number

EP 91 30 6913

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	GB-A-102 775 (CRAIG) * the whole document * *	1,2,3,4,8, 9,10	A 47 D 7/02
A	GB-A-419 613 (GOOCH) * page 2, line 95 - page 3, line 9 * * * page 3, line 22 - line 29 * * * figures * *	1,2,5,7	

TECHNICAL FIELDS SEARCHED (Int. Cl.5)

A 47 D
A 47 C

The present search report has been drawn up for all claims

Place of search	Date of completion of search	Examiner
The Hague	08 November 91	VANDEVONDELE J.P.H.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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